

Reg. No.:

First Year B.Sc Optometry Degree Regular/Supplementary Examinations
January 2022
Paper II – Physiology
(2016 Scheme)

Time: 3 hrs

Max marks: 80

- Answer all questions to the point neatly and legibly • Do not leave any blank pages between answers • Indicate the question number correctly for the answer in the margin space
- Answer all parts of a single question together • Leave sufficient space between answers • Draw table/diagrams/flow charts wherever necessary
- Write section A and section B in separate answer books. Do not mix up questions from section A and section B.

Q P Code: 123013

Section A – General Physiology

Marks: 40

Essay:

1. Name the layers of the adrenal cortex and mention the hormones secreted by them.
Describe the features of Cushing's syndrome. (3+7)

Short notes:

(3x5=15)

2. List the clotting factors and describe any one pathway of coagulation
3. Explain the chemical regulation of respiration
4. Cardiac output and its factors

Answer briefly:

(5x2=10)

5. Mismatched blood transfusion
6. Clinical features of diabetes mellitus
7. Functions of saliva
8. Types of circulatory shock
9. Blood pressure and its normal value.

One-word answer:

(5x1=5)

10. Excessive urination due to deficiency of antidiuretic hormone is called as
11. Normal value of WBC count is
12. The two types of nerve fibres which carry pain sensation areand
13. The name of the otolith organs located in the inner ear which sense the linear acceleration areand
14. Normal GFR value is

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Section B – Ocular Physiology

Marks: 40

Essay:

(10)

1. List the theories of color vision and describe any one theory in detail. Add a note on color blindness. (2+5+3)

Short notes:

(3x5=15)

2. Discuss the dynamics of circulation of the aqueous humor in the eye.
3. Explain the mechanism of accommodation in the eye
4. What is field of vision and how is it mapped

Answer briefly:

(5x2=10)

5. Purkinje images
6. Light adaptation
7. Snellen's chart
8. Layers of retina
9. Applanation tonometry

One-word answer:

(5x1=5)

10. Decreased permeability through the trabeculae results in
11. Varied curvature in different meridians of the cornea is a refractive error called as
12. Lesion in the optic chiasma results in a visual field defect called
13. Primary visual cortex is located in the
14. muscle causing pupillary constriction is supplied by the III cranial nerve
